KANSAS ANIMAL HEALTH NEWS

JULY 2010

Edited by
DR. BILL BRYANT AND KAREN DOMER

A NEW LEADER FOR KANSAS ANIMAL HEALTH DEPARTMENT!

On May 1, 2010, George Teagarden, the Kansas Livestock Commissioner for 16 years, passed the leadership of Kansas Animal Health Department to Bill Brown, D.V.M. While we certainly do miss Commissioner Teagarden's guidance and wisdom; we are equally pleased to have Dr. Brown on board. He brings very impressive credentials and a wealth of experience to his position as the new Kansas Livestock Commissioner.

Commissioner Brown is a native Kansan. He presently resides in Wamego, Ks. with his wife Marilyn. They have 3 grown daughters. Brown received his DVM degree from KSU in 1971. From 1974 to 1992, he owned two veterinary practices in Hugoton & Ulysses, Ks. From 1992 to 1995, he was Foundation Farms Staff Veterinarian for Dekalb Swine Breeders, Inc. From 1995 to 2000, he was Director of Veterinary Services for Dekalb Swine Breeders, Inc. He served as Health Services Veterinarian for Monsanto Choice Genetics and for Newsham Choice Genetics from 2000 to 2009. He was named by KVMA as the 2004 Kansas Veterinarian of the Year. He has been and is still active in Church, Community, and Professional Associations, and serves on many Boards; most recently the Governor's Task Force to bring the National Bio and Agro-Defense Facility to Kansas. He served in the U.S. Army Reserve Corps for many years, and was deployed three times. He retired in 2007 with the rank of Colonel. And in his "spare time", he is a distance runner!

Commissioner Brown has a passion for moving Kansas Animal Health Department into the future with vision and purpose, while maintaining high regard for past achievements and respect earned by this agency. We welcome Dr. Brown to Kansas Animal Health Department!

CHRONIC WASTING DISEASE IN KANSAS

By Shane Hesting, KDWP

Four presumptive positive CWD cases from Decatur County were confirmed positive last week. Total detected positives will be 15 for 2009-2010, unless a sick deer is submitted for testing and CWD is detected again before 31 July 2010.

The total number of samples for the 2009-2010 surveillance period were 2,738.

LOSS OF A BELOVED COLLEAGUE AND FRIEND

Dr. Carolyn "Coco" Sutton (KSU Veterinary class of 1973) passed away Monday, June 21, 2010. Dr. Sutton leaves behind a husband and three grown children (and grandchildren) as well as a host of friends and colleagues.

Dr. Sutton practiced in Sedan, Kansas for over a decade after receiving her DVM degree from KSU. Since 1987, she had worked for USDA APHIS Veterinary Services in southeastern Kansas, but she helped out wherever she was needed. A long-time friend described her "...nothing fancy about Coco, but she was one of a rare breed: a real lady who was absolutely fearless. She would try anything and do anything for anyone; a real friend. I don't believe there was ever anyone who met her who didn't like her."

On June 5, Dr. Sutton was working with her husband Ed on the family ranch when she suffered a head injury in an accident involving her horse. Sadly, Dr. Sutton succumbed to those injuries. She will be greatly missed by all who knew her.

Services were held at the Sedan High School Gymnasium on Friday June 25th. A memorial stone for Dr. Sutton will be placed at the KSU School of Veterinary Medicine. If you wish to contribute, please make your checks out to: “KSU Foundation” and send to Karen Domer, %Kansas Animal Health Department, 708 S.W. Jackson, Topeka, Ks. 66603.

Cards and other tributes may be sent to the Kansas Area Office (USDA, APHIS, Veterinary Services, 1947 NW Topeka Blvd; Ste F, Topeka, KS 66608). Dr. Vogt, Kansas AVIC, will ensure that these items are delivered to the Sutton family.

Kansas Animal Health Department extends deepest sympathies to Ed, Robyn, Casee, and Jake Sutton and family.

REMINDER---DID YOU KNOW?

By Bill Bryant, DVM (KAHD)

When OCV (official calf-hood vaccination) papers are submitted to the Kansas Animal Health Department (KAHD) the information contained on them is entered into a data base. This allows us to find the owner of that animal at the time of vaccination if the OCV tag number is known. We can also trace that tag number to the veterinarian that it was issued to. This information can be very valuable when doing an epidemiological study on a Brucellosis suspect for instance.

The OCV tag is also becoming one of our few means of officially identifying livestock ownership since we are no longer testing for Brucellosis at our livestock markets. Our Kansas Regulations require one copy of the calf-hood vaccination paperwork to be given to the owner, one to be retained by the veterinarian doing the work and the other copy to be submitted to the KAHD office within 10 days of vaccination. Please remember to send in a copy to our office for entry into our data base. If you happen to be cleaning out paperwork and find old copies that have not been sent in go ahead and send them in anyway. We would appreciate it. Thanks.

FORMER LIVESTOCK COMMISSIONER RECEIVES AWARD FROM KVMA

At the annual June Conference for Veterinarians at KSU last month, former Kansas Livestock Commissioner George Teagarden was awarded the **Kansas Veterinary Medical Association’s 2010 Distinguished Service Award**. Congratulations, Commissioner!

FIRST CASE OF CACHE VALLEY FEVER FOUND IN KANSAS

May 20, 2010

By Phil Erwin, DVM (USDA APHIS VMO)

A practitioner in south central Kansas notified one of our field veterinarians in late January that a cow herd of around 400 head was experiencing stillbirths, congenital anomalies(namely arthrogryposis-hydroencephaly or A-H) and a significant decrease in fertility rate. This herd was broken into several groups with the problems generally confined to the first calf heifers and one group of adult cows. These two groups were summer-pastured along a stream with more wetland than their other holdings. During the 2009 calving season they had some of the same signs but attributed it to genetic origin congenital anomalies from new bulls introduced to their Angus based herd. When the 2010 calving season began last January and these signs significantly increased, the practitioner sent diagnostic samples to several labs to learn if this was genetic or infectious in origin. After receiving reports of serum titers for Cache Valley Virus in a significant % of females showing clinical signs, he asked for help from USDA APHIS VS. We submitted samples from both apparently unaffected and affected females from both groups. A significantly high percentage of those showing clinical signs were seropositive for Cache Valley Virus. DNA testing for a genetic origin was negative.

Cache Valley Virus was diagnosed and named for a case in sheep in a Utah valley of the same name decades ago. It has been diagnosed in cattle in the U.S. but is still not common. This is the first we know of in Kansas. CVV is one of 250 recognized bunyaviruses most of which are arthropod-borne and cause persistent, nonlethal infections in their ruminant hosts. Representatives of this group are CVV, Akabane, and La Crosse fever virus. The virus, for example, is introduced by an infected mosquito biting a pregnant cow which shows no clinical signs, reaches the fetus via maternal circulation and causes fetal death or abortion. Fetal survivors develop A-H. Diagnosis is by clinical, pathological, and epidemiological investigation. There is some evidence that changes in climate and introductions of new mosquito species, their geographic distribution, and their ability to transmit disease more easily and frequently may be causing new problems.

Minimizing arthropod exposure of pregnant animals during the first trimester is one control method. There is no treatment and no vaccine in the U.S. Clinical signs and properties of the bunyaviruses are very similar so by “googling” bunyaviridae, Cache Valley Virus, or Akabane, much information is available.

KAHD FAD EMERGENCY PLANNING NEWS POINTS

By Karen Domer (KAHD)

- Annual training for members of the Kansas Veterinary Response Corps (KVRC) plus KSART’s Kansas Veterinary Medical Reserve Corps. took place in June at the KSU Conference for Veterinarians
- Some Counties are working to update their Foreign Animal Disease (FAD) Plans
- KAHD is writing a plan for receiving delivery from National Veterinary Stockpile in a FAD event
- Continuing work on Kansas’ Preparedness for Stopping (Permitting) Livestock Movement in a FAD emergency (from SAM’s KO Exercise October 2009)
- Meeting with KSU CVM personnel about co-planning for an animal disease emergency outbreak

ANIMAL DISEASE TRACEABILITY SYSTEM

By Bryan Rickard (Micro Beef Technologies)

In its efforts to create an improved livestock disease traceability system for the U.S. Livestock Industry, the USDA-Animal & Plant Health Inspection Service (APHIS) Branch has, once again, launched a series of "*Listening Sessions*" across the country to gather input from livestock industry stakeholders on the future direction of the ***Animal Disease Traceability*** program.

Ks. Animal Health Department (KAHD) participated in the first of five Listening Sessions which was held in Kansas City on May 11, 2010. Proceedings from that meeting can be viewed on line at the following address: http://www.aphis.usda.gov/traceability/downloads/wg_talking_points.pdf. Additional listening session locations have been set for Riverdale, MD, Denver, CO, Salt Lake City, UT, and Ft. Worth, TX. Additional meetings may be scheduled in the coming weeks.

In order to gain a clear perspective from Kansas livestock industry stakeholders, the KAHD has organized a group consisting of representatives from the Kansas Cattlemen's Association, Kansas Farm Bureau, Kansas Livestock Association, Kansas Livestock Marketing Association and its parent organization, the Livestock Marketing Association and Kansas State University Research and Extension. The ***Kansas Animal Disease Traceability Working Group*** (KADTWG) has a primary function of evaluating USDA's Animal Disease Traceability program preliminary guidelines in order to determine a workable traceability solution for Kansas producers.

Since the inception of KADTWG, it has met on two separate occasions. The initial meeting was prior to the Kansas City USDA listening session meeting. The group agreed in principal to a general outline for a workable animal disease traceability program which would help protect the Kansas livestock industry in the event of an animal disease outbreak without applying undue burden to the Kansas producer. Representatives of the KADTWG delivered this message to USDA officials during the Kansas City listening session.

During the second meeting of the KADTWG an outline was provided to the group on the preliminary Animal Disease Traceability guidelines which were laid out during the Kansas City listening session meeting. From those preliminary guidelines, KAHD asked the KADTWG members to craft a position paper, that when completed, will be sent to USDA officials outlining the guidelines that the Kansas livestock industry stakeholders would like to see put in place for a workable traceability system.

A workable animal disease traceability program is the number one key to protecting Kansas livestock industry and maintaining marketability options in the event that an animal disease event would occur within the State.

For Ks. Animal Health Department to rapidly and effectively respond to an animal disease event (whether it is a single incident or a full-scale outbreak), animal health officials need to know the identification of all animals potentially involved, where they are located, and what other animals might have been exposed. The more rapidly reliable information is made available, the faster affected animals can be located, appropriate response measures can be established, and disease spread can be halted.

Under the proposed Animal Disease Traceability guidelines, ***interstate*** livestock movements would be controlled and monitored by USDA-APHIS. (*For the foreseeable future, the Animal Disease Traceability program will focus only on the bovine species, including both dairy and beef cattle.*) Cattle that move across state or tribal boundaries will need to be tagged with an official animal identification device with the movement details recorded on an Official Certificate of Veterinary inspection (OCVI). ***Intrastate*** cattle movements within the borders of Kansas would be the responsibility of Kansas Animal Health Department.

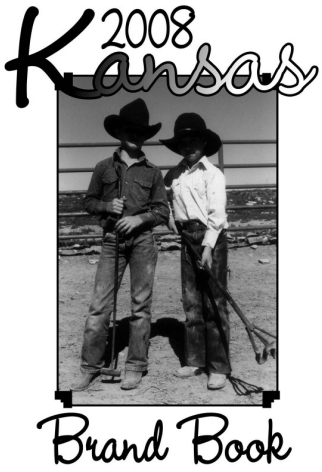
The official animal identification device that is being advocated by APHIS for the Animal Disease Traceability program is the "*low cost*, *low technology*" "brite tag", (similar to the bangs metal tag), system. USDA noted that other forms of currently approved animal id devices will be allowable under the program, such as Radio Frequency Identification.

Editors' Note: Bryan Rickard left KAHD employment in May to take a position with Micro Beef Technologies as their Micro PVP Program Co-Administrator. However, he agreed to stay on as a member of the KADTWG work group mentioned above. He is missed by us at KAHD, but we wish him well in his new employment.

EXPORTING/SHIPPING PETS TO THE EUROPEAN UNION:

By Kim Kirkham, DVM (USDA APHIS VMO)

All European countries require pets to be micro-chipped and current on their Rabies vaccination. The microchip is to be in place prior to initiating the preparatory work for exporting the animal. A few, select European countries require a Rabies titer test to be completed on the animal which must be accomplished at the Kansas State University Rabies Laboratory. (Submission forms and directions can be found on-line) Please call ahead to determine the proper certificate to be utilized dependent upon the country of destination. ***Prior planning and strategic timing of testing, treatments and health certification are vital to the success of all exports.*** Preparation for pet export can be a stressful time for both the owner and practitioner. Dr. Kirkham can be reached at the USDA APHIS, Veterinary Services office in Topeka for assistance with your international export needs. Please don't hesitate to contact Dr. Kirkham at (785) 270-1300.



FROM THE KAHD BRANDS DEPARTMENT

By Pat Schumaker (KAHD Brands Dept)

The Kansas Brand Department realizes the importance of the livestock industry to our state. It plays a role in helping to show livestock ownership through registered branding. The livestock brand is also an invaluable means to help detour cattle thieves when the brand is present on the animal. So the need for branding is always there.

Did you know that in Kansas, we have approximately 17,500 registered brands, (and over 500 new brands are registered yearly)? With the list of registered owners and brands ever changing, we have printed a Kansas Brand Book that is both informative and enjoyable to own. It is available in 3 different options to accommodate all. We are offering the ***2008 Kansas Brand Book*** **and four supplements** (one sent out annually) for **$70.00**, including shipping. We also offer the nice **Brand Book without future supplements** for **$35.00**, including shipping. A third option is our **Kansas Brand Book on CD**, which is available for **$15.00**, including shipping. Four supplements are also included in the $15.00 fee. They will be shipped on CD together with a reprint of the Brand Book yearly as they become available.

If you are interested in any form of the *2008 Kansas Brand Book*, please contact Pat Schumaker at Kansas Animal Health Department (**785-296-2326**), or e-mail pschumaker@kahd.ks.gov. We will be glad to help you with your order. What enjoyment for any livestock enthusiast!

WHITE-NOSE SYNDROME IN BATS

By Shane Hesting, KDWP

White-nose syndrome (WNS) is a disease that affects bats and has been responsible for 1 million bat mortalities in the eastern U.S., resulting in a 20% overall decline. The projected decline is estimated to be 40%, with some endangered bats facing extinction. Some states, like Vermont, are reporting losses at 90-95% in some areas, and a statewide decline of 70%. Currently, 14 states and 2 Canadian provinces are affected by WNS.

The disease is linked to a fungus, *Geomyces destructans* (Gd). It is not known whether the fungus itself kills the bats, or if the fungus is just a symptom of another, yet unknown, underlying problem. Infected bats are found with the white fungus growing on the wing membrane, muzzle, and ears. It is thought the fungus plays a role in disrupting hibernation. Bats have been observed flying around cave entrances at a time when hibernation should be occurring. Fat reserves are lost and bats die. Many dead bats are often found right at the cave or mine entrance. What exactly causes death is unknown. Some speculate it is a combination of pneumonia and cardiac arrest.

Geomyces destructans actively invades living tissue---unlike other fungi. It won't grow at room temperature. The upper limit seems to be 24C (75F). Bat to bat transmission has been observed, but the fungus is found in cave soil—suggesting environmental factors at work, too. It seems logical the fungus could be transported to uninfected caves by people or spelunkers via clothing and footwear.

The first bat mortality thought to be caused by white-nose syndrome was in Schoharie County, New York in February of 2006. The disease quickly spread to surrounding hibernacula that winter. During the winter of 2007-2008, the disease spread to Connecticut, Maryland, and Vermont. During 2008-2009, it spread to southern Virginia. This year infected individuals were found in Missouri and Oklahoma. The Oklahoma case did not result in mortality, suggesting a difference in susceptibility related to species or environmental factors.

Currently, bat samples from Kansas are being tested at the Southeastern Cooperative Wildlife Disease Study (SCWDS) in Georgia. Preliminary results were negative for Gd. Limited surveillance will continue in southeast Kansas where the federally endangered gray bat is known to occur.

Bats known to be affected by WNS include:

Little Brown	Indiana (FEDERALLY ENDANGERED)	Northern Long-eared
Big Brown	Cave	Southeastern
Tri-colored (formerly eastern pipistrelle)	Gray (FEDERALLY ENDANGERED)	Small-footed

Questions being asked:

1. Is the fungus the cause of mortality, or is it just a symptom of another malady?
2. Is WNS caused by disruption of feeding and hibernation by warm and variable winter weather?
3. Is the spraying of insecticides to combat West Nile virus reducing insect populations bats would need for energy stores?
4. Are bat flies causing WNS?
5. Are cavers/spelunkers responsible in part for transporting the disease to previously uninfected caves?
6. Why are bats in France, infected with the same species of fungus, not losing body weight and not dying? Resistance of the fungus is native to Europe? Environmental differences? Fungus is not the root cause and the true pathogen is not found in France?
7. What will be the ramifications of 2.4 million pounds of insects not being eaten by bats?

8. What will happen to cave ecosystems with the corresponding loss of bat guano?
9. What will happen to the already endangered Indiana and Virginia Big-eared bat?

CHANGES TO USDA VETERINARY ACCREDITATION PROGRAM REQUIRES ACTION BY ALL ACCREDITED VETERINARIANS

(From USDA APHIS VS)

Background. The National Veterinary Accreditation Program (NVAP) was established by USDA in 1921 so that accredited veterinary practitioners could assist Federal and State veterinarians in controlling animal diseases and facilitating the movement of animals and products. The mission of the NVAP is to ensure the health of our nation's livestock and animal population and to protect public health and well being.

Veterinarians who are accredited through NVAP work cooperatively with USDA's Animal and Plant Health Inspection Service and State Animal Health Officials to protect and improve the health, quality, productivity, and marketability of U.S. animals and products by preventing, controlling, and eradicating livestock diseases.

Brief overview of changes. The NVAP is undergoing changes intended to address the needs of the increasingly complex and fast-paced world of animal health, business, trade, and travel. The new program will require renewal every three years. Veterinarians accredited through the new program will be required to complete supplemental training, somewhat similar to the continuing education required to maintain a veterinary license in many states. In addition, under this restructured program, veterinarians will be required to obtain their accreditation in one of two different categories. Category I veterinarians would essentially be veterinarians working pets and non-livestock species (e.g. small animal practitioners). Category II veterinarians would be those who work with any/all species (e.g. mixed animal or large animal practitioners). *NOTE: Practitioners who issue health certificates for pet birds would need to obtain Category II accreditation.* This is a simplification of the new program and the categories, but you can refer to the links and references below for more detailed information.

These changes have been in development since 2004. In 2002, the AVMA advocated a change, which has urged USDA to make needed modifications to the NVAP, and supports the revisions being made. An article discussing these changes was published in JAVMA this year and is available on line. (www.avma.org/onlnews/javma/jan10/100115a.asp).

What currently accredited veterinarians must do. Veterinarians who are already accredited as of February 1, 2010 must elect to participate in the new NVAP by August 2, 2010. In order to apply for participation in the new program, you must complete an application (i.e. a VS Form 1-36A) and submit it to the NVAP staff in Riverdale, MD. Instructions for applying and the form to use are available on line at:

http://www.aphis.usda.gov/animal_health/vet_accreditation/av_participate.shtml

Once you apply and obtain your accreditation in one of the two new categories, no further training will be required until it comes time for you to renew your accreditation. At that time, you will be notified by USDA-APHIS that your accreditation is up for renewal and you will need to complete applicable refresher training or document that you have already done so. Essentially, currently accredited veterinarians will be "grandfathered in" by USDA until they come up for renewal. Renewals for currently accredited veterinarians will be staggered over the next 3 to 5 years. If you are currently accredited and do not elect to participate in the restructured NVAP by Aug. 2, 2010

your current accreditation will expire (expiration will occur on August 3). In addition, if you have attended an accreditation seminar and/or core orientation within the last 3 years but have not applied for your accreditation, your orientation will expire as well and you would then be required to attend another seminar/orientation in order to qualify for accreditation.

How to obtain further information. Further information and guidance can be found at the following website.

1. ***National Veterinary Accreditation Program Home Page*** with in depth information about the program changes, NVAP Updates, factsheets, and frequently asked questions. **(http://www.aphis.usda.gov/nvap)**
2. ***APHIS Press Release*** announcing the new program (http://www.aphis.usda.gov/newsroom/content/2009/12/updatevet.shtml)

And as always you can contact your local Kansas Area Office at (785) 270-1307.

INTERSTATE SHIPPING OF LIVESTOCK

Veterinarians, please be aware that when sending animals to a brand-inspections state (such as Nebraska) from a non-brand-inspections state (Kansas), the owner may be expected to present an **original** certificate of ownership for the brand inspection. Faxes or photocopies may not be accepted. In some cases, the receiver of the livestock might accept a Certificate of Veterinary Inspection (CVI) from the livestock owner's private practitioner if a certificate of ownership is not available.

If the owner of the livestock has neither of the above, payment could be withheld until the owner can supply proof of ownership to the brand inspector. Your clients should be aware of this.

Veterinary World Quick Notes

The Food and Drug Administration is seriously considering whether to approve the first genetically engineered animal that people would eat:
salmon that can grow at twice the normal rate.

Mosquitoes infected with West Nile virus have been discovered in Eastern Washington, prompting state health officials to urge that residents take precautions against the pests. The Washington State Department of Agriculture is recommending that horse owners vaccinate their horses against the virus. Last year, the state had 72 infected horses, the highest incidence in the nation. Typically, 50 percent of these animals die or need to be euthanized.

Are *E. coli* and other food-borne illness outbreaks becoming more frequent?
No. Recent data from the Centers for Disease Control and Prevention (CDC) indicate that the nationwide incidence of common food-borne illnesses like *E. coli* O157:H7 has not changed significantly in the last three years. Additionally, between 1996 and 2004, the incidence of *E. coli* O157:H7 infections decreased 25 percent.
From http://www.kla.org/

TRICHOMONIASIS IN 5 COLORADO COUNTIES

From USAHA News

The Colorado State Department of Agriculture says that bovine trichomoniasis has been found in five Colorado counties so far this year. Those counties are Conejos, Crowley, Prowers, Rio Blanco and Saguache. The venereal disease was found in cattle in 9 Colorado counties last year, 17 counties in 2008 and 13 counties in 2007. No facilities are under quarantine.

GOV PARKINSON APPROVES KAHD REQUEST FOR FEE RAISE FOR ANIMAL DISEASE CONTROL EFFORTS

Gov. Mark Parkinson signed legislation in April 2010 that will enable the Kansas Animal Health Department (KAHD) to raise additional fees for its disease control function. These fees will replace part of state funds cut by the Legislature the past two years. HB 2666 will allow the agency to generate an additional $296,000 per year by increasing the annual license fee for auction markets, feedyards, dairies and swine operations. The bill also raises the maximum fee for animals consigned to auction markets from 15¢ to 25¢ per head. KAHD intends to limit this increase to 5¢ per head for the next few years.

Without HB 2666, the Animal Health Department would have operated with a budget nearly $400,000 smaller than 2009. Former Kansas Livestock Commissioner George Teagarden informed the industry and lawmakers in January that without additional fee revenue or support from the state's general fund, the agency would be forced to leave three vacant positions open in the disease control program and furlough all KAHD employees at least 12 days in 2010. HB 2666 was supported by KLA after an industry task force of cattle feeders, cow-calf/stocker operators, dairy farmers, swine producers and auction market owners developed a fee increase proposal that was incorporated into HB 2666. In addition to KLA, proponents of the bill included the Kansas Pork Association and the Kansas Livestock Marketing Association. HB 2666 becomes effective July 1, 2010.

KAHD ANNOUNCES THE FOLLOWING COST INCREASES FOR VET SUPPLIES
(effective immediately):

CV Tags @ $ .11 each
Large Animal Certificate Booklets @ $17.00 each
Small Animal Certificate Booklets @ $17.00 each
This is the first increase in prices for supplies since 1993.
The new cost of supplies reflects the increase in printing costs and postage.

FREE JOHNE'S ONLINE COURSE

By Bill Bryant, DVM

To help beef producers understand Johne's disease and become acquainted with preventive measures, an online course has been developed specifically for beef producers. Underwritten by a grant from USDA and developed by the University of Wisconsin-Madison School of Veterinary Medicine, the online course covers the causes of Johne's disease, how Johne's disease spreads, how to prevent Johne's disease from entering your herd, how to test for Johne's disease and management practices to use to control infections. The course also explains how the Voluntary Bovine Johne's Disease Control Program works and how producers can participate in the national program.

"Each course is free to producers," states Dr. Elisabeth Patton, Designated Johne's Coordinator for Wisconsin and co-chair of the Committee on Johne's Disease, U.S. Animal Health Association. "Producers can complete their respective module in less than 60 minutes." Taking the Johne's disease online course involves six simple steps. The first five steps take about five minutes to complete. The final step—going through the course—will involve about 30-45 minutes.

Step #1: Go to the University of Wisconsin School of Veterinary Medicine web site,

www.vetmedce.org where you'll see the home page titled "Veterinary Continuing Education." click on "Courses" written in red at the lower left of the page.

Step #2: click on "Johne's Disease" located in the left-hand column.

Step #3: A new web page will appear. Click on "Johne's Disease Courses for Producers."

Step #4: This web page lists the six Johne's disease courses. click on the "Beef Producer" course title.

Step #5: Once at your species page, a list of what you'll learn is listed along with other relevant information.

Step #6: Begin your species-specific course. Producers wanting a certificate of course completion are asked to register before taking the course, and will be required to take a quiz after they watch and listen to the presentation.

To learn more about Johne's disease or to obtain your free copy of the new 16-page Johne's disease question-and-answer brochure, go to www.johnesdisease.org or call the National Institute for Animal Agriculture at (719) 538-8843.

WORDS OF WISDOM!
From Mahatma Gandhi: "The future depends on what we do in the present"
Ralph Waldo Emerson: "The first wealth is health"
Author unknown:
Everything that annoys us about others can help us to understand ourselves better

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Working together to protect the health of Kansas livestock